



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,237	08/20/2001	Roger Kenneth Abrams	RPS920000049US1	5556
45211	7590	10/25/2005	EXAMINER	
KELLY K. KORDZIK WINSTEAD SECHREST & MINICK PC PO BOX 50784 DALLAS, TX 75201			GURSHMAN, GRIGORY	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/933,237	Applicant(s) ABRAMS, ROGER KENNETH	
	Examiner Grigory Gurshman	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Claims 1 and 10 have been amended. The amendment of the instant claims has overcome the rejection under 35 U.S.C. 112. Accordingly the rejection of claims 1 and 10 under 35 U.S.C. 112 is withdrawn.
2. Referring to the independent claims 1, 10 and 19, Applicant argues that Ogawa does not meet some of the limitations of the instant claims, in particular the limitation "...determining if the request was transmitted from a user space or kernel space of the computer system, wherein if the request was transmitted from the user space then the user is unauthenticated user". Examiner respectfully disagrees and points out that Ogawa teaches that requests are analyzed and are not serviced if they do not match the request list (see Fig. 5 and Fig.9). The request list is a list of authenticated users, so by analyzing the source of request Ogawa determines if the request is from an unauthenticated user.
3. Referring to claim 19, Applicant also argues that Ogawa does not teach a denial of the request. Examiner respectfully disagrees and point out that one of ordinary skill in the art would have equated *not servicing* the request with *the denial* of the request.
4. Applicant further argues that *prima facie* case of obviousness has not been established since the examiner is relying upon an incorrect factual predicate in support for the rejection. Examiner respectfully disagrees with this assessment of the application of the prior art of record and points out that broad but reasonable interpretation of the claims is applied while the limitations from the specification, that Applicant is relying

Art Unit: 2132

upon, are not read into the claims. Examiner states that the combination of Ogawa and Willman does render the claims 1-27 obvious because one of ordinary skill in the art would have been motivated to modify the information processing apparatus servicing request received from the user kernel by adding the functionality to determine if the request meets the security requirements as taught in Willman for generating the exception an the interrupt of the execution of the user instructions (see Willman abstract and Fig. 7).

5. Examiner also points out that the term "user kernel" is used according to Applicant's specification. The rejections of claims 1-27 are maintained in view of the reasons provided herein.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (U.S. Patent No. 6,754,736 B1) in view of Willman (U.S. Patent No. 5,418,956).

8. Referring to the instant claims, Ogawa discloses an information processing apparatus, data inputting/outputting method, and program storage medium therefor (see abstract). Ogawa teaches that when a user process issues an input/output request in a

process performed in response to the input/output request generated by the user process, the input/output request is queued in the input/output request list, which is a queue in a list format on the user space side. On the kernel side, when a input/output request in the input/output request list is processed, the status is changed into "processed", and a list element whose status indicates `processed` is removed from the request list on the user space side.

9. Referring to the independent claims 1, 10 and 19, Ogawa teaches that upon receipt of an input/output request from a user in a kernel space, an input/output request acceptance unit accepts the input/output request from the user process. An input/output request processing thread generation unit generates a thread for processing the input/output request accepted by the input/output request acceptance unit as a plurality of divided threads (see column 2, line 65 through column 3 lines 1-5).

10. Referring to the instant claims the limitation "receiving a request to provide a service from a user" is met by receipt of an input/output request from a user in a kernel space (see column 2, line 65 and Fig. 1). Ogawa shows that request is sent form the user space (40) to kernel (50) - see Fig. 2. The limitation "determining if the request was transmitted from a user space ... of the computer system" is met by request acceptance process depicted in Figs. 5A and 5B.

Referring to the independent claim 19, Ogawa shows a processor and a memory unit coupled by the bus system (see Fig. 20). Ogawa teaches that requests are analyzed and are not serviced if they do not match the request list (see Fig. 5 and Fig.9). Ogawa, however does not explicitly teach determining if the request from unauthenticated user

fails to satisfy the security requirement. Referring to the instant claims Willman discloses a method and system for avoiding selector loads (see abstract and Fig. 5). Willman shows kernel Address space and Application (i.e. user) address space. Willman teaches that user requests are not processed if the request of the application program comes from the wrong address space. The application program is allocated the address space from 0 to 2 G bytes. The kernel is allocated the address space from 2 G bytes to 4 G bytes. When a task is started its segment descriptor table contains a code segment entry, a data segment entry, and, optionally, a thread environment block (TEB) entry. The code segment entry defines the user code segment with a segment base address of 0, a segment limit of 4 G bytes, and an attribute of execute. The data segment entry defines the user data segment with a segment base address of 0, a segment limit of 4 G bytes, and an attribute of read/write. The TEB segment, for example, has a segment base address of 128K and a segment limit of 64K bytes and an attribute of read and write. Willman shows the use of security attributes for the user space. Therefore, at the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the information processing apparatus of Ogawa by adding the functionality to determine if the request meets the security requirements as taught in Willman. One of ordinary skill in the art would have been motivated to modify the information processing apparatus servicing request received from the user kernel by adding the functionality to determine if the request meets the security requirements as taught in Willman for generating the exception and the interrupt of the execution of the user instructions (see Willman abstract and Fig. 7).

11. Referring to claims, 2, 11 and 20, Willman teaches that request is serviced if the requirements are met (see Fig. 6).

12. Referring to claims 3, 12, 21, one of ordinary skill in the art would have been motivated to determine if the request comes from the manager in the kernel space configured for secured connection, for not having to analyze the request prior to servicing it.

13. Dependent claims 4-9, 13-18 and 22-27 all recite servicing or not servicing the request based on the fact that request either meets or does not meet the security requirements. These claims are rejected on the same grounds as independent claims 1, 10 and 19.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GG



Grigory Gurshman
Examiner
Art Unit 2132



GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100